

Amendments to Claims

1.-102. (Canceled).

103. (New) A two-screen method of assaying intracellular G protein coupled receptor (GPCR) signaling inhibition, which comprises:

(a) providing a first library comprising peptide members, wherein the primary sequences of said members are based on the primary sequence of the eleven carboxyl-terminal amino acids of a native G protein G α subunit that binds to said GPCR on the G protein binding domain of said GPCR;

(b) screening said peptide first library members for binding to said G protein binding domain of said GPCR, wherein said screening comprises a competitive binding assay performed in the presence of a first competitive peptide which consists of the eleven carboxy-terminal amino acids of said native G protein G α subunit, to identify high-affinity peptide first library members that bind to said GPCR G protein the binding domain with higher affinity than that of said first competitive peptide;

(c) selecting a high-affinity peptide first library member identified in (b);

(d) providing a second library of member compounds;

(e) screening said second library member compounds for binding to said GPCR G protein binding domain, wherein said screening is a competitive binding assay performed in the presence of a second competitive peptide which consists of said selected high affinity peptide first library member of (c), to determine whether a second library member compound binds to said GPCR G protein binding domain with equal or higher affinity than that of said second competitive peptide.

104. (New) A method of claim 103, wherein said screening of (b) further comprises an additional binding assay.

105. (New) A method of claim 103, wherein said peptide first library members are labeled to provide a signal to detect binding.

106. (New) A method of claim 103, wherein binding of a first library member to said GPCR G protein binding domain is detected by contacting said GPCR with a ligand that activates said GPCR and measuring activation of said GPCR in the presence and absence of said first library member.

107. (New) A method of claim 103, wherein said first library is a combinatorial peptide library.

108. (New) A method of claim 103, wherein said eleven carboxyl-terminal amino acids of a native G protein G α submit is selected from the group consisting of SEQ ID NOS: 2, 13, 15, 17, 19, 21, 23, 25, 27, 30, 32, 34, 36, 38, 40, 42 and 45-111.

109. (New) A method of claim 108, wherein said eleven carboxyl-terminal amino acids of a native G protein G α submit is SEQ ID NO:38.